

ABSTRACT OF THE DISCLOSURE

An optical polarization beam splitter comprises a first optical fiber having an end defining a first optical axis, a second optical fiber having an end defining a second optical axis, and a third optical fiber having an end defining a third optical axis parallel to and spaced apart from the second optical axis. A collimating lens is disposed along the first optical axis positioned to form a collimated optical beam from the first optical fiber. A focussing lens is disposed along a path of the collimated optical beam. A birefringent walk-off crystal has a first face adjacent to the focussing lens and a second face located at a focal plane of the focussing lens and in contact with the ends of the second and third optical fibers. The birefringent crystal is oriented such that and has a thickness between its first and second faces selected such that a first component of the optical beam having a first polarization exits the crystal at its second face and enters the end of the second optical fiber along the second optical axis and a second component of the optical beam having a second polarization orthogonal to the polarization of the first polarization exits the crystal at its second face and enters the end of the third optical fiber along the third optical axis.